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ORRES. CONTROL
UTGOING LTR NO.

E ORDER #

2 RF 01797

DIST.	LTR	ENC
ILSFORD, M.D		
RERA, D.W.		
RI, M.S.		
TON, J.C.		
COMINI, J.		
L, L.		
RTINEZ, L.A.		
RKER, A.M.		
WERS, K.		
TT, G.K.		
LTON, D.C.	✓	
ARS, M.S.		
CE, K.D.		
R, N.R.		
RHEIS, G.M.		
BSHA,S	✓	
Spence,T	✓	
Deck,C	✓	
Putney,M	✓	✓
North,K	✓	✓
Garren,R	✓	✓
Nininger,R	✓	
Haines,P	✓	
Sutherland,AB	✓	
AQM File		
R. CONTROL	X	X
MN. RECORD		
STE REC. CTR.		
AFFIC		
TS/130		
ASSIFICATION:		
NI		
CLASSIFIED		
NFIDENTIAL		
CRET		

UTHORIZED CLASSIFIER SIGNATURE

EMPT FROM CLASS

R CEX-105-01

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REPLY TO RFP CC

):

CTION ITEM STATUS

PARTIAL/OPEN

CLOSED

R APPROVALS:

IG & TYPIST INITIALS

RMG | sle

KAISER•HILL COMPANY

August 12, 2002

02-RF-01797

Mr. Arch Crouse
Colorado Department of Public Health and Environment
Air Pollution Control Division, SSP-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530

AIR POLLUTANT EMISSION NOTICE FOR THE 903 PAD REMEDIATION PROJECT AT THE ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE (SITE) - AJR-031-02

Attached, please find an Air Pollutant Emission Notice (APEN), a check for the associated APEN fees, and supporting technical documentation for the 903 Pad Remediation Project. An APEN is being submitted to quantify particulate emissions from the project during excavation activities.

The 903 Pad, historically used for storage of over 5,000 drums of plutonium-laden solvents and oils, is being excavated to remove radionuclide-contaminated soils beneath the asphalt pad. At least the top two feet (asphalt pad, gravel layer and one foot of native soil) of the pad will be excavated, packaged and shipped to an off-site disposal facility. Soil excavation will be conducted within a 90-foot x 110-foot tent that will be used to protect the excavation from weather conditions and mitigate possible weather-related delays.

Also attached, please find a dust control plan for the project, as requested by the state.

If you have any questions concerning this correspondence or the attached information, please contact me at (303) 966-3687 or Rob Garren at (303) 966-2609, digital page (303) 212-1653.

Andrew Rosenman
Environmental Systems and Stewardship

RMG:se

cc.
J. Dion (DOE, RFFO)

Attachments: As Stated

AUG 2002
RECORDS CENTER

AIR POLLUTANT EMISSION NOTICE

FIRM NAME U.S. Department of Energy, Rocky Flats Environmental Technology Site, and Kaiser-Hill Company, L.L.C. AIRS ID _____ PERMIT NO. _____

MAIL ADDRESS 10808 Highway 93, Unit B, Golden, Colorado 804032-8200 PLANT LOCATION Section 2, Range 70W, Township 25 COUNTY Jefferson

PERSON TO CONTACT REGARDING THIS INFORMATION Andrew J. Rosenman TITLE Program Manager, Air Permitting, Kaiser-Hill, L.L.C. PHONE (303) 966-3687

GENERAL DESCRIPTION OF THIS PLANT'S FUNCTION Environmental Restoration and Waste Management **FEDERAL TAX I.D. NO.** 84-1296851

A. GENERAL INFORMATION		Normal Operation of Plant			Process Seasonal Throughput (% of Annual)				ADDITIONAL INFORMATION OR REMARKS:
No. of Employees	Land Area	Hours/Day	Hours/Year	Days/Week	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	N/A = Not Applicable
2,570	6,521.9 acres	24	8,760	7	25	25	25	25	

B. STACK OR VENT INFORMATION (Identify below which stack if plant has two or more; refer to attached sketch of plant layout)						
Height	Diameter	Temperature	Flow Rate	Velocity	Moisture	Plant ID No. for Stack
N/A	N/A ft	N/A °F	N/A ACFM	N/A ft/min	N/A %	903 Pad Remediation (soil disturbance activities)

C. FUEL INFORMATION	Design Rate (10^6 BTU/HR)	Kind of Fuel Burned	Annual Fuel Consumption		Fuel Heating Value: (BTU/lb, BTU/gal, or BTU/SCF)	Per Cent by Weight		Seasonal Fuel Use (% of Annual Use)				Space Htg (% Ann.)
Description of Combustion Unit N/A			Requested level	Data year level		Sulfur	Ash	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	
Make/Model:												
Serial No.												

D. PROCESS INFORMATION	Raw Materials Used	Raw Materials-Annual Consumption		Design Rate	Finished Product	Finished Product-Annual Output	
Description of Processing Unit N/A	Description	Requested level	Data year level	(Specify Units/Hour)	Description	Requested level	Data year level
Make/Model:							
Serial No.:							

E. POLLUTION CONTROL EQUIPMENT			Overall Collection Efficiency	ESTIMATED EMISSIONS (TONS/YEAR) AT THROUGHPUTS REQUESTED ABOVE		ACTUAL EMISSIONS (DATA YEAR)	ESTIMATION METHOD
Pollutant	Type of Control Equipment			CONTROLLED	UNCONTROLLED		
	Primary	Secondary					
Particulate	N/A	N/A	N/A	9.35	9.35	N/A	AP-42
PM_{10}	N/A	N/A	N/A	2.25	2.25	N/A	AP-42
SO_x							
NO_x							
VOC							
CO							

PLEASE USE APCD HAP ADDENDUM FORM TO REPORT HAZARDOUS AIR POLLUTANT EMISSIONS OR OTHER POLLUTANTS NOT LISTED ABOVE.

☐ **CHECK HERE IF YOU WISH THE DIVISION TO CALCULATE YOUR EMISSIONS. SEE "EMISSION ESTIMATES" INSTRUCTIONS ON BACK.**

CHECK ALL BOXES THAT APPLY

- ☑ New or previously unreported source*
- ☐ Modification of existing permit†‡
- ☐ Change in emissions, throughputs or equipment‡
- ☐ Transfer of ownership (List previous owner in REMARKS section of box A.)‡
- ☐ Relocation of Source‡
- ☐ Previous APEN is expiring‡
- ☐ Mandatory update or deferred reporting‡
- ☐ Request for Emission Reduction Credit†‡

* Complete all applicable portions of APEN
† Complete shaded areas ('Requested' values)
‡ Complete all information above box A, and those remaining portions which reflect changes

Signature of Person Legally Authorized to Supply Data:
Karan North, Manager, Environmental Systems & Stewardship, Kaiser-Hill, L.L.C. Karan North 12 Aug 02

Year for which the actual data applies: 2002

Signature of Person Legally Authorized to Supply Data:
Jonathan A. Dion, RFCA/Regulatory Compliance, DOE, RFFO Jonathan A Dion 8 August 2002

Date source began or will begin operation: August 2002

THIS NOTICE IS VALID FOR FIVE YEARS. A revised notice shall be filed prior to this expiration date, whenever a permit limitation must be modified, whenever control equipment is changed, and annually whenever a significant emission change occurs. For specific details see Regulation 3, Part A, § II.C.1.

$119.96 FILING FEE IS REQUIRED FOR EACH NOTICE FILED.

For information, call (303)692-3150.

APCD FORM 200A (9/93)

Mail to:
CDPHE, APCD
APCD-SS-B1
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

APEN # 1 OF 1

AIRS ID (APCD USE)

Page deleted contained personally identifiable information

Kaiser-Hill Environmental Systems and Stewardship
Rocky Flats Environmental Technology Site

903 Pad Remediation Project
APEN Submittal Report

August 12, 2002

Introduction

This report provides supporting information to the Colorado Department of Public Health and Environment, Air Pollution Control Division (CDPHE, APCD) for submittal of an Air Pollutant Emission Notice (APEN) form quantifying particulate emissions from soil remediation activities at the 903 Pad.

This information and the associated APEN are being transmitted to the CDPHE, APCD to meet the requirements of Colorado Air Quality Control Commission Regulation No. 3. The reportable criteria pollutants are particulates (both particulate matter less than 10 micrometers in diameter [PM10] and total particulate matter [PM]).

Background

The 903 Pad was used in the 1950s and 1960s for the storage of over 5,000 drums of plutonium-laden solvents and oils on the open ground. Over time, the drums corroded and leaked contamination into the soil. The drums were removed in 1967 and 1968 and an asphalt pad was installed in 1969 to cover and contain the contamination.

Extensive sampling and characterization activities have been conducted in the 903 Pad area to provide additional information required to determine the best course of action to remediate/manage this area. Site characterization activities began with radiological measurements of surface soils at 1,100 locations. Additionally, subsurface soils were characterized by collecting over 500 soil samples from 79 boreholes on and around the 903 Pad. It is not anticipated that volatile organic compound (VOC) contaminated soil will be encountered during this remedial action.

Project Description

The remedial objective is to remove radionuclide-contaminated soils beneath the 903 Pad. Existing sampling data indicate that all significant radionuclide contamination is within the top 12 inches of native soil with varying levels and depths. Therefore, using mechanical excavation equipment, at least the top two feet (asphalt pad, gravel layer and one foot of native soil) of the 3.4 acre pad will be excavated, packaged and shipped to an off-site disposal facility.

Soil excavation will be conducted within a 90-foot x 110-foot tent that will be used to protect the excavation from weather conditions and mitigate possible weather-related delays. Within the tent, the excavation area will be approximately 80 feet x 90 feet. Subareas will be established on a grid within the tent based on the reach of the excavating equipment and tent logistics. It is anticipated that there will be nine or sixteen subareas to a tent. When excavation and backfill activities within the tent are complete, the tent will be moved to the adjacent excavation area. It is anticipated that the tent will be moved 20 times over the 903 Pad area.

APEN Submittal Information

An APEN form is provided with this report. Reportable particulate emissions will be generated during soil remediation activities. Radionuclide and VOC emissions were quantified and were below any reporting or monitoring threshold. Per the Rocky Flats Cleanup Agreement, a construction permit is not required for this type of activity.

Emissions

Particulate air pollutant emissions were calculated for various soil disturbance activities utilizing emission factors from the "Compilation of Air Pollutant Emission Factors," EPA, AP-42. The reported emissions listed below are uncontrolled. No credit was taken for control methodologies (watering, dust suppression techniques, etc.).

The following table provides a summary of particulate emissions from remediation activities:

Emissions Summary Table:

	Particulate Emissions (Tons per year)	**PM-10 Emissions** (Tons per year)
Paved Road Emissions (AP-42, 13.2.1)	4.65E+00	9.07E-01
Unpaved Road Emissions (AP-42, 13.2.2, 9/98 file via Internet with dust control constants from Actinide Study)	3.75E+00	5.69E-01
Soil Handling w/ Front end Loader (AP-42, 13.2.4, loading and unloading soil/concrete/clean fill)	1.15E-02	5.44E-03
Graders for Pad Area (AP-42, Section 11.9, Table 11.9-4, scraper emission factor for top soil)	6.52E-01	6.52E-01
Excavation with Backhoe (AP-42, Section 11.9, Table 11.9-2)	4.03E-02	1.59E-02
Bulldozer for Compacting Soil (AP-42, Table 11.9.2)	6.93E-02	1.35E-02
Wind Erosion Emissions (AP-42, Section 13.2.5.3)	5.45E-02	2.73E-02
Stockpile Emissions (AP-42, Section 13.2.5.3)	1.20E-01	5.99E-02
Total Emissions:	**9.35E+00**	**2.25E+00**

- LAND DEVELOPMENT -

FUGITIVE DUST CONTROL PLAN FOR LAND DEVELOPMENT

(This must be submitted with the Air Pollutant Emission Notice-and-Application for Emission Permit)

Regulation No. 1 requires that a fugitive dust control plan be submitted by applicants whose source / activity results in fugitive dust emissions. The control plan must enable the source to minimize emissions of fugitive dust to a level that is technologically feasible and economically reasonable. If the control plan is not adequate in minimizing emissions a revised control plan may be required. The control plan (if acceptable to the Division) will be used for enforcement purposes on the sources.

Please check the dust control measures which you propose for your activity. The Division will enforce the control measures checked. Use separate sheets if more space is needed. Also note items with an asterisk (*). This indicates those measures which will probably be required.

I. Control of Unpaved Roads on Site

- [x] Watering
  - [ ] Frequent (Watering Frequency of 2 or More Times Per Day)
  - [x] As Needed
- [ ] Application of Chemical Stabilizer
- [x] Vehicle Speed Control

  Speeds limited to 25 mph maximum. Speed limit signs must be posted.

  (Generally 30 mph is maximum approvable speed on site.)
- [x] Gravelling

II. Control of Disturbed Surface Areas on Site

- [x] Watering
  - [ ] Frequent (Watering Frequency of 2 or More Times Per Day)
  - [x] As Needed
- [ ] Application of Chemical Stabilizer
- [ ] Vehicle Speed Control

  Speeds Limited To _____ MPH Maximum. Speed Limit Signs Must Be Posted.
- [x] Revegetation Revegetation Must Occur Within One Year Of Soil Disturbance
  - [x] Seeding with mulch
  - [ ] Seeding without mulch
- [ ] Furrows at right angle to prevailing wind

  Depth of furrows _____ Inches (must be greater than 6")
- [x] Compaction Of Disturbed Soil On A Daily Basis To Within 90 % Of Maximum Compaction (As determined by a Proctor Test).
  - [ ] Foundation areas only; or
  - [x] All disturbed soil.
- [x] Wind Breaks

  Type: _____ (Example: Snow Fence, Silt Fence, etc.)
- [ ] Synthetic Or Natural Cover For Steep Slopes.

  Type: _____ (Netting, Mulching, etc.)

Work will be performed inside an enclosed tent equipped with HEPA ventilation system.

- LAND DEVELOPMENT -

III. Prevention Of Mud And Dirt Carried Out Onto Paved Surfaces.

- ☑ Prevention
  - ☑ Gravel Entry Ways
  - ☐ Washing Vehicle Wheels
  - ☑ Other: Removal of mud/dirt from vehicle wheels
- ☐ Cleanup of Paved Areas Frequency: _____ Times Per Day
  - ☐ Street Sweeper
  - ☐ Hose With Water
  - ☐ Other: _____

Additional Sources of Emissions

List any other sources of emissions or control methods Work performed inside weather tent. Excavated soils will be placed directly into Intermodal waste containers with lids. Excavations will be backfilled inside tent. Work will be suspended (outside of tent) if winds exceed 30 mph.

Tracey M Spence — AUG 8, 2002
Signature of a Responsible Official (not a vendor or consultant) — Date

TRACEY SPENCE — PROJECT MANAGER
Name (please print) — Title

Check the appropriate box if you want:

- ☐ Copy of the Preliminary Analysis conducted by the Division
- ☐ To review a draft of the permit prior to issuance

(Checking any of these boxes may result in an increased fee and/or processing time)

Send this form along with $119.96 to:
Telephone: (303) 692-3150

Colorado Department of Public Health and Environment
Air Pollution Control Division
APCD-SS-B1
4300 Cherry Creek Drive South
Denver, CO 80246-1530

Small Business Assistance Program
(303) 692-3148

Small Business Ombudsman
(303) 692-2135